## **CLAIMS**

A method of treating arbuscular mycorrhizal fungi, known as AM fungi, in which
AM fungi are brought into contact with at least one stimulating agent in at least
an amount that is suitable for stimulating the development and/or growth of said
AM fungi, said stimulating agent having a structure selected from:

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- 2. The method as claimed in claim 1, wherein said method is carried out on AM fungi in the form of spores.
- 3. The method as claimed in claim 1, wherein said method is carried out on mycorrhizated root fragments.
- 4. The method as claimed in any one of claims 1 to 3, wherein said treatment of the
  AM fungi is carried out in the presence of living plant material, known as the host
  plant, corresponding, at least partly, to a constitutive root part of a plant capable
  of forming a symbiosis with AM fungi.
- 5. The method as claimed in any one of claims 1 to 4, wherein said treatment is carried out in an aseptic medium *in vitro*.
  - 6. The method as claimed in any one of claims 1 to 4, wherein said treatment is carried out on at least one whole host plant cultivated in a pot.
- 7. The method as claimed in any one of claims 1 to 4, wherein said treatment is carried out on at least one whole host plant cultivated in the field.
  - 8. The method as claimed in any one of claims 1 to 7, wherein AM fungi selected from *Glomus intraradices* and *Gigaspora rosea* are used.
  - 9. A method of producing inoculum of arbuscular mycorrhizal fungi, known as AM fungi, in which a co-culture of AM fungi is prepared in the presence of living plant material, known as the host plant, corresponding, at least partly, to a

constitutive root part of a plant capable of forming a symbiosis with AM fungi, which method comprises also bringing said co-culture into contact with at least one stimulating agent in at least an amount that is suitable for stimulating the development and/or growth of said AM fungi, said stimulating agent having a structure selected from:

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- 10. The method as claimed in claim 9, wherein the AM fungi are treated with said coculture by a method as claimed in any one of claims 1 to 8.
- 11. A method of cultivating a host plant capable of forming a symbiosis with arbuscular mycorrhizal fungi, known as AM fungi, in which there is added to a cultivation soil at least one agent for stimulating the development and/or growth of AM fungi, which agent is selected from:

which method comprises adding the stimulating agent at the time of sowing of the seeds of the host plant that is to be cultivated and/or subsequently to said sowing.

- 12. The method as claimed in claim 11, wherein the host plant is cultivated in a greenhouse.
- 13. The method as claimed in claim 11, wherein the host plant is cultivated in the field.
- 14. The method according to claim 11, wherein said AM fungi are naturally present in said cultivation soil.

- 15. The method as claimed in claim 13, wherein said cultivation soil is supplemented with AM fungi.
- 16. The method as claimed in any one of claims 11 to 15, wherein agents for stimulating the development and/or growth of said AM fungi are added repeatedly.
- 17. A composition comprising, in combination, a quantity of seeds of a host plant capable of forming a symbiosis with AM fungi, and a quantity of agent for stimulating the development and/or growth of AM fungi, which agent is selected from: GR24, GR7, Nijmegen-1, demethylsorgolactone, strigol, alectrol, sorgolactone, orobanchol.
- 18. The composition as claimed in claim 17, wherein said composition is formulated so as to form a coating by means of a material capable of disintegrating on contact with a solvent.
  - 19. The composition as claimed in either claim 17 or claim 18, wherein it also comprises a quantity of AM fungus inoculum.

- 20. The composition as claimed in claim 19, wherein the inoculum is inoculum of AM fungi selected from: Glomus intraradices and Gigaspora rosea.
- A composition comprising, in combination, a quantity of AM fungus inoculum and a quantity of agent for stimulating the development and/or growth of AM fungi, which agent is selected from: GR24, GR7, Nijmegen-1, demethylsorgolactone, strigol, alectrol, sorgolactone, orobanchol.
- The composition as claimed in claim 21, wherein said composition is formulated so as to form a coating by means of a material capable of disintegrating on contact with a solvent.